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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/815,419

04/01/2004

Shintaro Honjo

OKUYAM 3.0-008

7666

530 7590 12/01/2008  
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EXAMINER

TAKEUCHI, YOSHITOSHI

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

12/01/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/815,419	<b>Applicant(s)</b> HONJO ET AL.	
	<b>Examiner</b> YOSHITOSHI TAKEUCHI	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

1. Claims 1-3 remain for examination and claim 4 is cancelled. The rejection of claim 4 is withdrawn in view of the cancellation of claim 4.

#### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of the Title 35 U.S. Code not included in this section can be found in a prior Office action.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iida (JP 10,230,137) in view of Higuchi (US 5,009,871).

Iida in view of Higashi is applied to the claims for the same reason stated in the previous Office action.

This office Action incorporates the prior rejections of rejections 1-3, with the following modifications in response to the applicant's amendments:

Regarding the amended limitations of claim 1, Higuchi teaches a gas liquid contact process comprising a mist eliminator (column 6, lines 60-63, where the spray cleaner reads on a "mist eliminator" or in the alternative makes the "mist eliminator" obvious because both of them perform the similar functions—bringing oxidizing agent in contact with the exhaust air. See MPEP § 2144.06(II) which includes a cleaning solution, to which one of air or an oxidizing agent is added (column 6, line 32-37 and 64-65, where the wash tower contains washing liquid and the wash fluid contains hypochlorous acid hydrogen peroxide which may be added to the washing liquid in the lower part of the tower), which is in contact with said exhaust gas (column 6, lines 61-62), wherein the oxidation-reduction potential of said cleaning solution is controlled by one of blowing of air or the addition of said oxidizing agent, so as to be at least 600mV

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(Table 1, where the addition of sodium hypochlorite oxidizing agent provides a 820mV oxidizing-reduction potential).

It would have been obvious to one of ordinary skill in the art to add both the control process step and effluent treatment process step of Higuchi to the method of Iida in order to prevent corrosion of the scrubber due to the volatilization of metallic mercury.

***Response to Arguments***

4. Applicant's arguments filed August 29, 2008 have been fully considered but they are not persuasive.

a. The applicant argued that neither reference discloses a mist eliminator in a contacting step to bring a cleaning solution to which either air or an oxidizing agent is added to contact the exhaust gas.

In response, Higuchi teaches a spray tower (column 6, line 62-63) that brings a cleaning solution with an oxidizing agent (column 6, line 42, where the oxidizing agent is hypochlorite. See also Table 1, where sodium hypochlorite is an oxidizing agent), where the cleaning solution contacts the exhaust gas (column 6, line 60, where the cleaning solution is a continuous-type smoke cleaner).

b. The applicant also argues that because claims 2 and 3 depend from claim 1, which the applicant argues is not anticipated or made obvious, that these claims are not anticipated or made obvious by virtue of their dependence from claim 1.

In response, claim 1 is made unpatentable by Iida (JP 10,230,137) in view of Higuchi (US 5,009,871) as explained *supra*. Also, the rejections made in the prior Office action are hereby incorporated by reference, obviating claims 2 and 3.

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSHITOSHI TAKEUCHI whose telephone number is (571) 270-5828. The examiner can normally be reached on Monday-Thursday 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/  
Supervisory Patent Examiner, Art Unit  
1793

/Yoshitoshi Takeuchi/